1: Underhill E-5 (1931-1935)1946 NU28 Papago NU28

tion, made after careful discussion of the archaic words with several informants. At the left of each such item appears a serial number which will indentify it in a future volume of texts.

Some ceremonies, like the rainmaking, are still being widely held. Others, like girl's puberty, have lapsed completely. Notes at the chapter ends give the present status of each but, for consistency, the descriptions are all in the past. This echoes the wording of old ceremonialists who usually preferred to describe the rituals as they flourished at the turn of the century, before reservation days.

A few of the songs and speeches have appeared in a previous volume, *Singing for Power,* University of California Press, Berkeley, California, 1938. They are here reproduced by the kind permission of the University of California Press.

Funds for this study were generously supplied by the Humanities Council of Columbia University. The writer is deeply indebted to Drs. Franz Boas and Ruth Benedict, under whose immediate supervision the work was carried out. The work had the able co-operation of practically the whole teaching staff of the Sells reservation, with much practical help from the superintendent, Mr. T. B. Hall. The true authors of the book, however, are the Papago ceremonialists who painstakingly dictated their rituals in order to make them available for future generations.

RUTH M. UNDERHILL

United States Indian Office
Washington, D.C.
January, 1946

2: Underhill E-5 (1931-1935)1939 NU28 Papago NU28

124 for accurate discriminations. It was found that the interpreter must always be of the same dialect group as the informant and, if possible, of the same village. On the one occasion when an interpreter had to be taken into what was, to him, a foreign village, the general distrust interfered seriously with work.

The informants were chosen because each was expert in some particular line but sometimes a period of probation was necessary on my part before one would consent to instruct me. Consent obtained, the sessions usually ended with the declaration: "I have told you to the best of my knowledge. If some one tells you differently, let me know. I do not wish you to write a mistake." As often as possible various people were consulted, and the variation in their accounts was usually found due to regional differences. Two informants refused to speak at all and their portion of the Wiikita ritual is lacking. The list gives each informant's occupation and the affiliations which might influence him such as sib, village and dialect division. It is realized that to gain a full understanding of regional differences and therefore, perhaps, of the past history of these people, an even more intensive study should be made in each locality.

000 [122] The present work was made possible by grants from the Columbia University Humanities Council and from special funds. It was suggested by Dr. Franz Boas, to whom, like all his students, I owe the deepest appreciation for inspiration, for keenly constructive criticism and for discipline in thinking. Dr. Ruth Benedict, under whose direction the work was done has been my constant reliance, not only for administrative help but for the use of her own rich material and for constant suggestion and stimulation. To Dr. Gladys Reichard, Professor of Anthropology at Barnard College I owe much kindly help in the field and out of it. Dr. J. Alden Mason, of the University of Pennsylvania Museum and Dr. George Herzog, of Columbia University, have generously made me free of their material on the Papago and Pima. Dr. Byron Cummings, Dr. John Provinse and Miss Clara Lee Fraps of the Department of Anthropology of the University of Arizona have given me every courtesy and assistance.

On the reservation, I have received valuable aid from Father Bonaventura Oblasser of the Franciscan missions, whose knowledge of the Papago, both from church records and from long experience cannot be duplicated. The two superintendents, Mr. Elliot and his successor, Mr. Hall, have been generous with assistance and hospitality. Mrs. Bennet, Miss Shorten, Miss Rouse, Mr. and Mrs. Carruth and Mr. and Mrs. Moyer all have given me hospitality, transportation and other most necessary aid, often at personal sacrifice to them-

4: Joseph et al D, E-5 (1942-1943) 1949
NU28 Papago NU28

INTRODUCTION

PILOT STUDY AND GENERAL PROCEDURE

114 After the acceptance of the Indian Education Research Project by the Papago Tribal Council in February, 1942, a three-month "pilot" study was conducted on the Papago Reservation by Dr. Laura Thompson, Project Co-ordinator, Dr. Ruth Underhill, and Dr. Alice Joseph. Dr. Underhill, anthropologist with the Bureau of Indian Affairs, had already made extensive field studies among the Papago, and Dr. Joseph had worked with the group for a year in the capacity of Reservation field physician. With the help of the Tribal Council, the Sells Parent-Teachers' Association, and the Indian Service personnel, especially D'Arcy McNickle, field representative, and the teachers at the Sells, Vamori, Gu Achi (Santa Rosa), Choulic, Schuchk (Santa Rosa Ranch), and Kohatk schools, the investigators tried out a number of different kinds of tests and field procedures. Based on results of the "pilot" field study, the following general procedure was adopted for the project as a whole:

125 The personalities and life-histories of a representative sample of children from each selected community were studied by means of a battery of psychological tests of both the projective and the performance types, supplemented by interviews with parents, teachers, and other community members and by medical examinations. The systematic study of individual personalities was limited to children of school age (six to eighteen years) because of their greater accessibility for the testing program. Much of the testing and interviewing was done by Indian Service teachers, trained and supervised by members of the research staff. Medical examinations and tests requiring experienced technicians for their administration, such as the Rorschach and the Thematic Apperception (adapted), were given by qualified staff personnel. The testing program is described in chapter xi.

122 Background data concerning the culture, the geographic environment, and the history were collected by anthropologists, who also drew on the literature, both published and unpublished, and on long-range plans prepared by the administrative personnel in co-operation with the Indians of each Agency.

Field findings were analyzed and interpreted by Project technicians at the University of Chicago.

SELECTION OF PAPAGO CHILDREN AND VILLAGES TO BE STUDIED

121 Owing to rather considerable regional differences in the degree of white contact on the Papago Reservation and to local variations in culture, it seemed advisable to select children from two areas, one representing a more acculture-

5: Castetter & Bell N-5 (1938-1940 1942
NU28 Papago NU28

No work as extensive as this can be executed without the assistance of a number of specialists in various fields. We have found it necessary to call for help upon a number of individuals, every one of whom has responded most generously. It is, therefore, a genuine pleasure to acknowledge our obligations.

Most of all we wish to express our gratitude to the officers of the American Philosophical Society who made the field work possible by two grants. We are especially indebted to Dr. Leslie Spier, who has assisted in a number of ways, most tangible of which was a careful and critical reading of the manuscript. The manuscript has been read and criticized by Volney H. Jones of the Ethnobiological Laboratory of the University of Michigan; by C. J. King, Senior Agronomist, U. S. Field Station, Sacaton, Arizona, who has assisted also in supplying data on modern Pima agriculture; by H. A. Ireland, Agricultural Extension Agent of the Gila River Reservation; and parts of the manuscript have been checked by Dr. D. D. Brand, Professor of Anthropo-geography at the University of New Mexico. C. B. Brown, Agricultural Agent for Pima County, Arizona, has kindly furnished information on modern Papago crops. To H. V. Clotts, Assistant Director of Irrigation, Office of Indian Affairs, we are especially obligated for data on Pima and Papago irrigation and for making it possible to borrow from the Office of Indian Affairs rare copies of unpublished reports on Pima-Papago irrigation. Apart from those mentioned specifically in the footnotes to the text, we are indebted to others for definite technical information. Deserving special mention are: Dr. Forrest Shreve, Carnegie Desert Laboratory, Tucson, Arizona; Dr. Charles T. Vorhies, Economic Zoologist, University of Arizona; Dr. Lyman Benson, Assistant Professor of Botany, University of Arizona.

We are particularly obligated to T. B. Hall, who, during the time of our studies among the Papago, was Superintendent of the Papago Indian Reservation, and who was very helpful in facilitating our work among these Indians; also to

7: Lumholtz N-5 (1909-1910)1912
NU28 Papago NU28

CHAPTER III

AN EXPEDITION INTO SOUTHERN ARIZONA—MY COMPANION—THE RANGE OF BABOQUIVARI—FRESNAL—PAPAGO MANNER OF CURING DISEASE—AT THE BOUNDARY—AN UNUSUAL RELIGIOUS COMMOTION—VISIT TO A SACRED CAVE—INDIAN OASIS

124 On June 20 I started from Tucson bound for a journey of exploration of that part of Arizona which is occupied by the Papago Indians. My sole companion was José Xavier Pablo, a full-blooded civilized native of that tribe, twenty-six years old. He had learned carpentry in Tucson, in which he was as proficient as any white man. He was also a painter and plumber; in fact, he could turn his hand to almost anything of a practical nature. Thus, assisted by two other Indians, he had put up the telephone line between Tucson and the Presbyterian Mission School, which he had frequented for nine years. He furnished his own wagon and two hardy horses bred in the desert, and before starting he shod his horses himself. Pablo also served as my interpreter. He was intelligent and reliable, besides being of an unusually even temper; during the two months we travelled together, I do not remember ever to have known him cross or to lose his temper.

122 In addition to the usual provisions, we had two canteens of the generous Western size, each capable of holding two and one-half gallons of water, and also one of smaller size. Of course, the water barrel on the side of

7: Lumholtz N-5 (1909-1910) 1912
NU28 Papago NU28

the wagon was not wanting; also rifle, shot-gun, and riding saddle were taken along, not to mention photographic cameras and the necessary scientific instruments. In the outskirts of Tucson, near an old mill, we filled our barrel and gave our horses a good drink at the clear, smooth-flowing stream of the Santa Cruz River, which was in such a delightful contrast to the arid landscape.

It had been my intention to go down first along the eastern side of the Baboquivari Range as far as La Osa Ranch, but the road turned out to be sandy and heavy, and I was obliged to return and limit my initiatory journey to travelling along its western side. A happy-looking Papago family from the suburbs of Tucson passed us on their way to the sahuaros (giant cactus); they were going to spend the *Dia de San Juan*, midsummer day, in the country picking the much coveted fruit. An Indian on horseback was on his way to the hot city, Tucson, for the same celebration. Everyone to his taste!

Baboquivari is the familiar name given to an extensive range south-west of Tucson. From its central part rises a peak of somewhat striking shape which gave origin to its name, Baboquivari being a Spanish corruption of the Papago name Vavkívolik, meaning: "mountain (*vav*) narrow about the middle (*kívolik*)"; seen from the south, the almost perpendicular sides of the peak appear slightly drawn in at the base. The peak, rising nearly fifty miles south-west of Tucson as the crow flies, can be seen from a great distance, from the neighborhood of the Jack-rabbit mine and the Ajo Mountains in the west, to Altar, Sonora, in the south. Prof. R. H. Forbes, of the

17:Castetter & Underhill N.E-5 (1931-1934) 1935
NU28 Papago NU28

for who had dreamed of badger, rabbit, or eagle, and could sing songs to remove their power. If a rule had been broken, the ceremony must be gone through again beside the sickbed.

The Papagos, it is obvious, believed in the power of songs and dreams to a high degree. But they were not mystics. They were, and still are, a highly practical and industrious people whose days are spent in labor, while their artistic impulse finds its release in the singing of Elder Brother's songs and the composing of new ones to supplement them.

The collection of specimens and study of techniques were done during four visits to the Papago country, extending from July to October, 1931, August to October, 1932, February to October, 1933, and November to December, 1934. These visits were financed by successive grants from Columbia University in connection with a larger ethnographical study.

The authors wish to express their genuine appreciation to Dr. J. J. Thornber and some of his students at the University of Arizona for identifying numerous plant specimens. Special thanks are also due Dr. Thornber for assistance in providing certain information, particularly in connection with the cultivated plants. To Ellen Wright Castetter we are greatly indebted for assistance in the preparation of the manuscript.

* * * * * *

In the following pages, the Papago words have been spelled according to the recommendations of the Committee of the American Anthropological Association on the Phonetic Transcription of Indian Languages (Smithsonian Miscellaneous Collections, Vol. 66, No. 6).

The vowels *a*, *i*, *o*, *u*, are pronounced roughly as in Spanish or Italian. The vowell *ï* is an unrounded central vowel whose sound approximates that of *i* in English *sir*. *p*, *t*, *k*, at the beginning of a word are pronounced without the aspiration which follows them in English; their sounds

18: Kelly E-4, 5 (no date) 1963 NU28 Papago NU28

FOREWORD

The studies upon which this report is based had their inception in a series of Papago Tribal resolutions and proposals dating back to the summer of 1958, and in the continuing effort on the part of the Bureau of Indian Affairs and members of Congress from Arizona to find a solution to the very pressing economic situation of Papago Indians. 121 122 659

In the summer of 1958 the Papago Tribal Council and the Association for Papago Affairs, an organization of Indians and other citizens of Southern Arizona, requested Arizona's Congressional delegation to join together in a bipartisan effort to secure federal appropriations for a complete and detailed study of Papago reservation resources, economic conditions, and the Papago manpower potential. The intention was to secure the facts upon which a Papago development plan could be based in order to assure: "That the Papago Indians and their reservation will assume a place of security, dignity, and economic importance in the broader community which includes the reservation, and that the Papago people may continue to be masters of their individual and tribal destiny in the Arizona of tomorrow."

Resolutions authorizing the above studies were introduced in the Senate by Barry Goldwater and in the House by Congressman Stewart Udall, but Congress failed to take action. During the spring of 1960, at the continued urging of the Papago Tribal Council, the Association for Papago Affairs and many individuals, notably William S. King, Chester Higgas and Douglas Holeclaw, Senator Barry Goldwater with the help of Roger Ernst, at that time Assistant Secretary of the Interior, secured an allocation of Bureau of Indian Affairs funds for the purpose of conducting a Papago study. Arrangements were then made, in March of 1960, for a contract between the Bureau of Indian Affairs and the University of Arizona in which the Bureau of Ethnic Research was assigned two parts of the larger study proposed in 1958: (1) A manpower survey which would consist of employment data

121 and supplementary information on adult Papago Indians, the data to be presented
122 in the form of a detailed listing of information on individuals, accompanied by
657 an interpretive summary report. (2) A survey of the current use by Indians of
[129] Papago agricultural and stock raising resources. This material, plus much other information on the Papago and the Papago reservations which had been gathered through the years by the University of Arizona, is contained in the following report.

The most important additional information consists of the demographic and sociological data contained in the Bureau of Ethnic Research Papago Population Registar which was assembled under the sponsorship of the National Cancer Institute. It was understood that the manpower information in Chapter IV of this report would be drawn principally from our Papago Population Register which, incidentally, was not completed until the first week in October of this year.

121 Members of the staff of the Bureau of Ethnic Research, in connection
657 with the above contract, have also agreed to serve as consultants in the preparation of a Papago Development Program which will be based, in part, upon the material in this report. The need for such a Program was stated fully in the 1938 Association for Papago Affairs resolution:

> "Whereas, the Papago Indian Tribe, the second largest tribe of Indians in Arizona, has repeatedly asked for an assistance program from the federal government in the form of the Papago Development Program which was written almost ten years ago; and
>
> "Whereas, the Papago Development Program, no longer considered to be applicable by the Bureau of Indian Affairs, was written without sound knowledge of certain basic facts about the Papago people and their reservation such as: The size of the Papago Tribe; the residence patterns of its members; detailed and quantified information concerning family income; the extent and composition of the Papago labor force; trends in Papago economic adjustment; conditions of Papago health, education, and welfare; the economic potential of the reservation, especially mineral deposits, etc.; and

000 loyalty, generosity and competence of all these people have made my work comparatively easy. I thank each one, and promise each one a future world where they can work longer hours for little or no pay since these are the two things they all seem to want.

●122 Mr. Thomas H. St. Clair, superintendent of the Papago Agency, his predecessor Mr. Harry Gilmore and the heads of the various agency departments have [114] been consistently and generously helpful in our work. Much of the data, as a matter of fact, was gathered and tabulated by members of the agency staff.

[123] Mr. Eugene Johnson, Chairman of the Papago Tribal Council, and his predecessors Mr. Mark Manuel and Mr. Enos Francisco, have not only given direct assistance but have explained and endorsed our work on the reservation so that interviews with Papago families were carried out smoothly and pleasantly. Our thanks also go to Mr. Edward J. Sullivan, administrative assistant to the tribal chairman, who provided us with needed information and help from the tribal office.

W.H.K.

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Table 3. Papago Population by Districts 1914 and 1959

District	1914 (Clotts)	1959 (BER)
Baboquivari	949	562
Chukut Kuk	512	214
Gu Achi	695	531
Gu Vo	200	230
Hiokiwan	222	346
Pisinimo	396	330
Schuk Toak	565	370
Sells	659	1,026
Sif Oidak	1,115	552
Total	5,313	4,161

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[101]

The Present Population. The information which follows is derived from a Papago population register secured by the Bureau of Ethnic Research in 1958 and 1959 in connection with a research project sponsored and in major part financed by the Biometry Branch of the National Cancer Institute. The work was under the direction of Dr. Robert A. Hackenberg and cooperating agencies were the Papago Tribe, the Division of Indian Health of the Public Health Service, the Bureau of Indian Affairs, and the Arizona State Office of Vital Statistics.

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A population register is not a census. It is intended to serve as a permanent record of identifiable

19: Dobyns E-5 (1950) 1951 NU28 Papago NU28

657 The Indians of the Southwest solved their dilemma by seeking work to support themselves while they struggled for greater political power (even while becoming an ever smaller minority in the total population), and pled with Congress for huge appropriations to rehabilitate their abused reservation lands.

The Indian Bureau attacked the economic problem where its officials recognized the situation and could with funds allotted by Congress. Bureau administrators know wages from agricultural harvesting contribute a large share to Southwestern Indian income. They have long wanted more exact knowledge of effects upon natives produced by their experience in the fields, and the role Indians play in the economy of Southwestern agriculture.

121 [122] Accurate knowledge is essential for intelligent and effective administration. Recognizing this fact, the Indian Bureau agreed to a grant to the University of Arizona's Department of Anthropology for an attack on one phase of the problem.

This report is the result. It is a report on the role of one Southwestern Indian tribe in the cotton harvest on Anglo-owned irrigated lands near its tribal reserves. It is a picture in microcosm of the economics of all Indians of the region at mid-century, except for specific tribal peculiarities inherent in a different culture and location. It is an example of adjustment of an Indian tribe to demands arising from close and intimate contact with an increasing Anglo population majority, and to their insufficient land base.

19: Doby.as E-5 (1950) 1951 NU28 Papago NU28

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122 The information reported herein was mostly gathered first-hand by the auther, primarily between October 1 and December 15, 1950, under the sponsorship of the Department of Anthropology, University of Arizona. Dr. Emil W. Haury, Head of the Department, furnished greatly appreciated encouragement and arranged for film to make a photographic record. Dr. Edward H. Spicer, Professor of Anthropology, guided the research and reporting after furnishing the original inspiration for the project and proposing it to the Indian Bureau. Any deficiencies in this report --and there are many-- are not the responsibility of these men. They are due to the writer's failure to investigate as well as he has been trained to do, and a lack of sufficient funds to investigate as thoroughly as he would have preferred. This last deficiency may be charged to the failure of the American public to appreciate the necessity for social research to sound public administration, as expressed in failure of Congress to appropriate to the Indian Bureau adequate research monies.

122 For their assistance in making this report as good as it may be, the writer is grateful to Drs. Spicer and Haury. I am indebted to the U. S. Indian Bureau and Mr. and Mrs. W. A. Pottenger for help in financing my research, and to the Board of Regents of the University and State Colleges of Arizona for its approval of the project. My thanks also go to the Anthropology Club at the University of Arizona for use of its mimeographing facilities for quick preparation of this paper. *Principal credit for any excellences in this report belongs to the farmers and the Papagos who patiently answered many questions.*

[115]